

**PATENT APPLICATION**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Jock D. MACKINLAY et al.

Group Art Unit: 2176

Application No.: 10/687,486

Examiner: A. LONG

Filed: October 17, 2003

Docket No.: 131754

For: SYSTEMS AND METHODS FOR EFFECTIVE ATTENTION SHIFTING

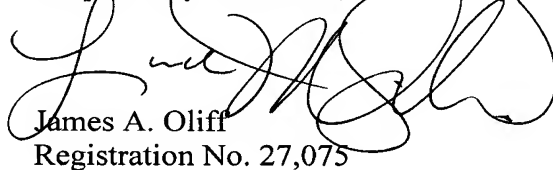
**RESPONSE TO NON-COMPLIANT APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In reply to the March 5, 2009 Notification of Non-Compliant Appeal Brief (copy attached), Applicants hereby resubmit the entire "Appendix A - Claims Appendix" section of the June 30, 2009 Appeal Brief. The resubmitted section fully complies with the requirements of 37 C.F.R. §41.37(c)(1)(viii).

Respectfully submitted,



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JAO:LMS/ccs  
Date: March 25, 2009

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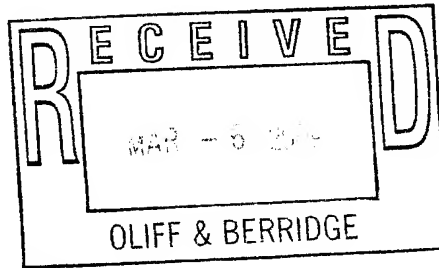
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,486	10/17/2003	Jock D. Mackinlay	131754	7949

27074 7590 03/05/2009

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EXAMINER

ART UNIT

PAPER NUMBER

DATE MAILED: 03/05/2009

Please find below and/or attached an Office communication concerning this application or proceeding.

**DUE DATE**

APR 5 2009

**DOCKETED**By BMG on 3/6 2009By B and 3/6 2009  
Oliff & Berridge

<b>Notification of Non-Compliant Appeal Brief (37 CFR 41.37)</b>	<b>Application No.</b> 10/687,486	<b>Applicant(s)</b> MACKINLAY ET AL.	
	<b>Examiner</b> Andrea N. Long	<b>Art Unit</b> 2176	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

The Appeal Brief filed on 30 June 2008 is defective for failure to comply with one or more provisions of 37 CFR 41.37.

To avoid dismissal of the appeal, applicant must file an amended brief or other appropriate correction (see MPEP 1205.03) within **ONE MONTH or THIRTY DAYS** from the mailing date of this Notification, whichever is longer.

**EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136.**

1. ☐ The brief does not contain the items required under 37 CFR 41.37(c), or the items are not under the proper heading or in the proper order.
2. ☐ The brief does not contain a statement of the status of all claims, (e.g., rejected, allowed, withdrawn, objected to, canceled), or does not identify the appealed claims (37 CFR 41.37(c)(1)(iii)).
3. ☐ At least one amendment has been filed subsequent to the final rejection, and the brief does not contain a statement of the status of each such amendment (37 CFR 41.37(c)(1)(iv)).
4. ☐ (a) The brief does not contain a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings, if any, by reference characters; and/or (b) the brief fails to: (1) identify, for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function under 35 U.S.C. 112, sixth paragraph, and/or (2) set forth the structure, material, or acts described in the specification as corresponding to each claimed function with reference to the specification by page and line number, and to the drawings, if any, by reference characters (37 CFR 41.37(c)(1)(v)).
5. ☐ The brief does not contain a concise statement of each ground of rejection presented for review (37 CFR 41.37(c)(1)(vi)).
6. ☐ The brief does not present an argument under a separate heading for each ground of rejection on appeal (37 CFR 41.37(c)(1)(vii)).
7. ☒ The brief does not contain a correct copy of the appealed claims as an appendix thereto (37 CFR 41.37(c)(1)(viii)).
8. ☐ The brief does not contain copies of the evidence submitted under 37 CFR 1.130, 1.131, or 1.132 or of any other evidence entered by the examiner **and relied upon by appellant in the appeal**, along with a statement setting forth where in the record that evidence was entered by the examiner, as an appendix thereto (37 CFR 41.37(c)(1)(ix)).
9. ☐ The brief does not contain copies of the decisions rendered by a court or the Board in the proceeding identified in the Related Appeals and Interferences section of the brief as an appendix thereto (37 CFR 41.37(c)(1)(x)).
10. ☒ Other (including any explanation in support of the above items):

Claims 45-47 were not included in the Appeal Brief's Claims Appendix. In addition the subheading A under section VII Arguments does not include claims 45-47 as part of the subheading for claims that were rejected under 102(b) as being anticipated by Microsoft Excel. Appropriate correction of all claims provided in the CLaims Appendix in proper format is required. See the "Order Returning Undocketed Appeal to Examiner" dated 02/26/2009.

/DOUG HUTTON/  
Supervisory Patent Examiner, Art Unit 2176

/Andrea N Long/  
Examiner, Art Unit 2176

**APPENDIX A - CLAIMS APPENDIX**

CLAIMS INVOLVED IN THE APPEAL:

1. A method of shifting attention comprising the steps of:  
determining the location for a focus of attention;  
determining a display event;  
determining the location of the display event;  
determining an attention shifting display element based on the display event,  
the determined location of the display event and the focus of attention; and  
determining a distance between the focus of attention and the display event;  
wherein the attention shifting display element is determined based on the  
determined distance, such that different types of attention shifting display elements are  
determined for different distances.
3. The method of claim 1, wherein the focus of attention is determined based on  
at least one of: monitoring user actions and monitoring user activity.
4. The method of claim 3 wherein user actions are monitored based on at least  
one of eye-tracking, head tracking, arm tracking, user selection tracking, video information,  
audio information and gestures.
5. The method of claim 1, wherein the display event is associated with at least  
one of animated information, static information and help information.
6. The method of claim 1, wherein the focus of attention is located on a first  
display and the display event is located on a second display.
7. The method of claim 1, wherein the distance between the focus of attention  
and display event includes at least one non-sensible portion.
8. The method of claim 6, wherein the distance between the focus of attention  
and the display event includes at least one non-sensible portion.

9. The method of claim 1, wherein determining the attention shifting display element comprises the steps of:

determining a dynamic attention shifting display element based on a display event located at the periphery of attention; and

determining a static attention shifting display element based on a display event located at the focus of attention.

10. The method of claim 1, wherein determining the attention shifting display element comprises determining a combination attention shifting display element based on a display event located more than a threshold distance from the focus of attention.

11. The method of claim 9, wherein the focus of attention is located on a first display and the display event is located on a second display.

12. A method of determining an attention shifting display element comprising the steps of:

determining a focus of attention;

determining a location of a display event;

determining an attention directing portion of an attention shifting display element based on a distance between the focus of attention and the location of the display event, such that different types of attention shifting display elements are determined for different distances.

13. The method of claim 12, further comprising determining an attention attracting portion of an attention shifting display element based on the distance between the location of the display event and the location of the focus of attention.

14. The method of claim 12, further comprising determining at least one information portion within the focus of attention, associated with the attention shifting

display element, and where the information portion displays information associated with the display event.

15. The method of claim 14, where the information portion is at least one of: a mathematical operator and a symbolic operator.

16. The method of claim 12, where the attention shifting display element is dynamically determined based on continued focus of attention on a display region.

17. The method of claim 16, where the continued focus of attention is determined based on user monitoring.

18. The method of claim 12, where the attention shifting display element is dynamically determined based on continued focus of attention on the display event and wherein the display event is based on at least one of: a mouse event; a keyboard event and exceeding a threshold time.

19. A system of shifting attention comprising:

- an input/output circuit for receiving a display event information;
- a memory;
- a processor;
- an attention determination circuit that determines a focus of attention;
- a display event location determination circuit that determines the location of the display event;
- an attention shifting display element determination circuit that determines an attention shifting display element based on the display event information, the location of the display event and the location of the focus of attention; and
- a distance determination circuit that determines the distance between the focus of attention and the display event,

wherein the attention shifting display element is determined based the determined distance, such that different types of attention shifting display elements are determined for different distances.

21. The system of claim 19, where the focus of attention is determined based on at least one of: monitoring user actions and monitoring user activity.

22. The system of claim 21 where the user actions are monitored based on at least one of eye-tracking, head tracking, arm tracking, user selection tracking, video information, audio information and gestures.

23. The system of claim 19, where the display event is at least one of animated information, static information and a help message.

24. The system of claim 19, wherein the focus of attention is located on a first display and the display event is located on a second display.

25. The system of claim 19, where the distance between the focus of attention and display event includes at least one non-sensible portion.

26. The system of claim 24, where the distance between the focus of attention and the display event includes at least one non-sensible portion.

27. The system of claim 19, where determining the attention shifting display element comprises the steps of:

determining a dynamic attention shifting display elements based on a display event located at the periphery of attention; and

determining a static attention shifting display element based on a display event located at the focus of attention.

28. The system of claim 19, where determining the attention shifting display element comprises determining a fusing attention shifting display element based on a display event located more than a threshold distance from the focus of attention.

29. The system of claim 27, wherein the focus of attention is located on a first display and the display event is located on a second display.

30. A system of determining an attention shifting display element comprising:  
an attention determination circuit that determines the focus of attention;  
a display event location circuit that determines the location of the display event; and

an attention directing indicator circuit that determines an attention directing portion of an attention shifting display event based on a distance between the focus of attention and the location of the display event, such that different types of attention shifting display elements are determined for different distances.

31. The system of claim 30, further comprising the step of determining an attention attracting portion of the attention shifting display element based on the distance between the location of the display event and the location of the attention.

32. The system of claim 30, further comprising the step of determining at least one static information portion within the focus of attention associated with the attention shifting display element, and where the static information portion displays information associated with the display event.

33. The system of claim 32, where the information portion is at least one of: a mathematical operator and a symbolic operator.

34. The system of claim 30, where the attention shifting display element is dynamically determined based on continued focus of attention on the display event.

35. The system of claim 34, where the continued focus of attention is based on user monitoring.



36. The system of claim 30, wherein the continued focus of attention on a display event is based on at least one of: a mouse event; a keyboard event, exceeding a threshold time.

37. Computer readable storage medium comprising: computer readable program code embodied on the computer readable storage medium, the computer readable program code usable to program a computer for shifting attention comprising the steps of:

determining the location for a focus of attention;

determining an display event;

determining the location of the display event;

determining an attention shifting display element based on the display event, and the determined location of the display event; and

determining a distance between the focus of attention and the display event;

wherein the attention shifting display element is determined based on the determined distance, such that different types of attention shifting display elements are determined for different distances.

39. A means of shifting attention comprising:

means for determining the location for a focus of attention;

means for determining a display event;

means for determining the location of the display event;

means for determining an attention shifting display element based on the display event, the determined location of the display event and the focus of attention; and

means for determining a distance between the focus of attention and the display event;

wherein the attention shifting display element is determined based on the determined distance, such that different types of attention shifting display elements are determined for different distances.

40. A means of determining an attention shifting display element comprising:  
means for determining a focus of attention;  
means for determining a location of a display event;  
means for determining an attention directing portion of an attention shifting display element based on a distance between the focus of attention and the location of the display event, such that different types of attention shifting display elements are determined for different distances.

41. The method of claim 1, wherein the attention shifting display element is determined based on the location of the display event and the determined distance.

42. The method of claim 12, wherein the attention directing portion is determined based on the location of the display event and the determined distance.

43. The system of claim 19, wherein the attention shifting display element is determined based on the location of the display event and the determined distance.

44. The system of claim 30, wherein the attention directing portion is determined based on the location of the display event and the determined distance.

45. The computer readable storage medium of claim 37, wherein the attention shifting display element is determined based on the location of the display event and the determined distance.

46. The memo for shifting of claim 39, wherein the attention shifting display element is determined based on the location of the display event and the determined distance.

47. The means for shifting of claim 40, wherein the attention directing portion is determined based on the location of the display event and the determined distance.